

National Research Vessel Task Team (NRVTT)

Plenary Meeting

22 September 2025

9:30 PDT / 10:30 MDT / 11:30 CDT / 12:30 EDT / 1:30 ADT / 2:00 NDT

https://us02web.zoom.us/j/88607781225

NRVTT Leadership: Doug Bancroft (CSSF), Brent Else (MEOPAR / UCalgary), Heather Reader (MUN), Doug Wallace (Dalhousie)

Secretariat: Jonathan Kellogg (MEOPAR)

Agenda

Time	Topic	Speaker
12:30	Welcome + Leadership Introductions	Heather Reader
12:35	Approval of the <u>April 2024 Report</u>	Heather Reader
12:40	Review of NRVTT Terms of Reference	Brent Else
12:45	Developments from Canada's Research Vessel Seascape	Doug Bancroft
1:00	Recent Notable Canadian Expeditions	Brent Else
1:10	Updates from MEOPAR's Expedition Fund	Brent Else
1:25	Upcoming opportunities for the NRVTT	Doug Wallace
1:35	Letter to NSERC Ship Time Program	Heather Reader
1:40	Community Roundtable	Heather Reader
1:55	Upcoming Meetings	Heather Reader
2:00	Closing	Heather Reader

Meeting Minutes

- Meeting called to order at 9:32 Pacific. 25 in attendance.
- Introductions of NRVTT Chairs
- Approval of the <u>2024 report</u>. Moved and seconded Doug Wallace and Doug Bancroft
 - 2 abstain (first meeting)
- Terms of Reference now found on the NRVTT website Brent Else
 - o Please review the Terms of Reference
 - o Review during the next meeting
- Update on the Research Vessel Seascape Doug Bancroft.
 - Canadian science fleet
 - CCGS Amundsen
 - Older vessel, but refit has extended the service life at 46 years old. Very capable with major resources available for science
 - CCGS Tully
 - 40 years old. Smaller, but still capable, but academics need to partner with government to get access. Replacement will be in the 2030s
 - CanPac Valkyrie
 - 31 years old. New acquisition to CanPac. Privately owned and operated. Happy to support science on this oceangoing platform. Complimentary to the CanPac Valor which is more of a coastal vessel. Capable of operating all MORI modules. Cranes good for lifting containers. \$65-75k per day + mobilization time + fuel. \$25-35k per day for fuel. About \$100k per day for this vessel.
 - Canadian OOSV Naalak Nappaaluk.
 - Set for delivery November 2nd.
 - Current price tag of \$1.4 billion, but very capable.
 - Will be going to the east coast. How will the science be scheduled??
 - o Canadian Coast Guard transfer to the Department of National Defense
 - Both CCG and DND retain a commitment to ocean science, but the mechanism for scheduling ocean science is not yet formalized. Currently mostly word of mouth.

AOPS vessels (6 of them) are nearly all delivered. Can carry MORI modules. Can carry ROPOS modules, but still rather crowded. Vessels do not have dynamic positioning, but Coast Guard captain from the Tully is teaching the Navy captains how to do this.

CCG AOPVs

- Will be based on the east coast. \$100m into two ships for them to be developed and starting to be built. How will they be used for other CG missions, in addition to the science roles?
- Still a risk that they could not be online while other vessels are being decommissioned.
- o If you wish to get onboard one of the vessels, reach out to the co-chairs or Jonathan and we can facilitate arranging that for you.
- Will the Coast Guard support government science or all science including academics?
 - The CG has historically supported all ocean science, not just the government scientists. Perhaps even looking for academics to partner with. It's a known unknown that the ocean science mandate is still seeking clarification as to how others will access this ship time.
- Recent Notable Canadian Expeditions Brent Else
 - o Modular Ocean Research Infrastructure
 - Includes a containerized CTD Launch and Recovery System
 - Containerized meeting room and computer lab
 - Containerized laboratory
 - Containerized fridge / freezer storage room
 - MORI was mobilized last year to join the Canadian Antarctic Research
 Expedition 2025
 - MEOPAR volunteered to mobilize the MORI assets and academic researchers to get it aboard the HMCS Magaret Brooke.
 - NRCan also provided another flat deck winch.
 - o Overview of CARE 2025 expedition (summarized in <u>CBC documentary</u>)
 - MORI modifications from Hawboldt enabled the CTDLARS to go over the railing of the HMCS Margaret Brooke.
 - DFO provided the rosette that would fit over the railing.

- Chemistry container got crowded, but was essential on a ship that didn't have lab space otherwise.
- Over 20 CTD casts. Deepest was to 1000m. May have been an issued with the conducting cable, but may have been beneficial to test equipment in advance of the cruise.
- Lack of dynamic positioning was somewhat a challenge for wire angles. Mostly drifted, but Navy was very helpful in making sure that operations were possible in up to 25kts of wind. Operations were better with winds <20kts.
 - Coast Guard put together a precis to teach the Navy how to do hovering without dynamic positioning.
- o It was a success, and there will be a session at ArcticNet in December about this.
 - Demonstration of MORI and of AOPVs used in science operations.
- Was anything particularly lacking in CARE 2025?
 - A second lab would have been handy for additional space.
 - Not a lot of meeting type space to co-exist with shipmates. Lack of quiet space.
 - It is possible to stack the lab space, but it would require a bit of work to make it accessible via a ramp.
- Would pelagic-benthic coupling be possible to investigate at the same time as the water column?
 - There's no A-frame, but NRCan was on board with some coring, but had limitation for the cable breaking strength and the crane that was available. A box-grab could be possible, but a box corer is a bit large and the issue is the weight on pullout. Would need to have that solved. Big issue would be drift under windy conditions.
 - Could consider the CanPac Valkyrie.
- o Did the Navy have the skills to problem solve issues on the deck?
 - Brent says that the skill and willingness was there to resolve any issues that arose. The Navy does do a lot of operations with instruments on the end of lines, so this work was not new. They were interested in working to problem solve and they were very good at working from the small boats. Vice-admiral Topshee also thought this was a good experience for

his crew and how that could be useful for Navy operations. There is a chain of command though so the cultural shift took an adjustment.

- Next for MORI is that MEOPAR has successfully recruited someone.
 Announcement will be in the not-too-distant future. That individual will be developing the operations shortly.
- MEOPAR's Expedition Fund Brent Else
 - o Largely defined by the NRVTT feedback.
 - Three categories of funding
 - Rapid Response
 - Strategic Support
 - Major Expeditions
 - o Rapid Response
 - Goal is to quickly respond to an unexpected event
 - Planning could happen in a couple of weeks
 - Review process is rolling
 - o Strategic Support
 - Like the STAC program, but can go beyond NSERC funding recipients
 - Call is now open. Deadline December 12th.
 - Major Expeditions
 - Looking for NRVTT to apply for how to use ~\$1M projects. Details coming in first week of October.
 - Hopefully the NRVTT sees topics being addressed as discussed at past NRVTT meetings.
- Upcoming expedition opportunities / ideas Doug Wallace
 - The idea of the Tartupaluk / Hans Island Transect
 - A collaboration between Canada, Denmark, Finland, and others.
 - MSV Botnica
 - Works in the Baltic in the winter, but summers in Baffin Bay.
 - 100 m long and can accommodate a large personnel and very capable.
 - Both an icebreaker and offshore support vessel.
 - DP class 3. Accommodations for 40-50 in addition to the crew.
 - Heave compensating crane
 - Has a moon pool as well.

- Could have up to 5 legs of research.
 - Transatlantic legs + north/south legs up the Labrador Sea. Could be more or less north south instead of just coast to coast.
- MORI could be used aboard to make it an oceanographic vessel.
- Canadian-led multidisciplinary research?
- Could it be justification to expand MORI pool?
- The science added to the vessel operations would have incremental increases in CO2 emissions and fuel expenses.
- Shows cooperation and collaboration across sectors and internationally.
- Opportunities for monitoring AMOC.
 - The Scotland-Canada Overturning Array (SCOTIA) led by Neil Fraser, Alan Fox, and Stuart Cunningham, Scottish Association for Marine Science, Oban
 - Comparable to OSNAP array
- Potential for engagement of multiple countries and for Canadian-led expeditions.
- What other types of science could be done besides water column work?
- Could start as soon as summer 2026.
- o When would it go to Hans Island?
 - Vessels coming in June / July and leaving in October, but season may be somewhat flexible. This is still TBD.
- Letter to the NSERC President for changes to the Ship Time Program Heather Reader
 - Program is still valuable, but there have been a few years of low numbers of applicants
 - Suggestions:
 - Two years of funding, or up to two years in the future
 - To allow for funding of mooring deployment and recovery.
- Upcoming meetings Heather Reader
 - October 14th webinar –accessing the French oceanographic fleet.
 - New opportunities to access the French vessels their capabilities
 - o DFO will present in November on the new OOSV, CCGS Naalak Nappaaluk.
 - o In person meeting attached to ArcticNet. December 15th.
- Roundtable discussion

- o John Jamieson
 - Draft of NSERC letter to be circulated?
 - Yes. The idea was that it would be community focused, but not a requirement for external signatures.
- Breanna Gricken notes that she is ready to help anyone who is interested in the STAC program. Looking forward to reading the letter and addressing how this could look going forward.
- Meeting adjourned at 10:48.